

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Alfred I-Tsung Pan Art Unit : 2625
Serial No. : 10/805,019 Examiner : Storey, William C.
Filed : March 19, 2004 Confirmation No.: 7778
Title : LABELING A PORTABLE DATA STORAGE DEVICE STORING A
COLLECTION OF IMAGE DATA

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

I. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas.

II. Related Appeals and Interferences

Appellant is not aware of any related appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of Claims

Claims 1-30, which are the subject of this appeal, are pending.

Claims 25 and 26 stand objected to.

Claims 1-30 stand rejected.

Appellants appeal all rejections of the pending claims 1-30.

CERTIFICATE OF TRANSMISSION

I hereby certify that this document is being transmitted to the Patent and Trademark Office via electronic filing

Aug. 7, 2008

Date of Transmission



(Signature of person mailing papers)

Edouard Garcia

(Typed or printed name of person mailing papers)

IV. Status of Amendments

The amendments filed February 13, 2008, have been entered and acted upon by the Examiner.

No amendments were filed after the final Office action dated March 31, 2008.

V. Summary of Claimed Subject Matter

A. Independent claim 1

The aspect of the invention defined in independent claim 1 is an image processing apparatus that includes a port (FIG. 3, element 56; ¶ 34), a label composer (FIG. 3, element 76; ¶ 39), and a print module (FIG. 3, element 58; ¶ 35). The port is configured to receive a portable data storage device (FIG. 3, element 52; ¶ 34) having a memory (FIG. 3, element 54; ¶ 34) configured to store a collection of image data and a digital label (FIG. 3, element 10; ¶ 34) including a plurality of display elements each capable of presenting one of at least two possible colors (¶¶ 24, 26; FIG. 1). The label composer is operable to designate an image (FIG. 5, element 90) in a collection of images being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection (FIG. 6, block 92; ¶ 45). The print module is coupled to the port and the label composer (FIG. 3; ¶ 39). The print module is operable to selectively configure the display elements in the digital label of the portable data storage device received in the port to print an image corresponding to the representative image designated by the label composer (FIG. 6, block 160; ¶¶ 53, 55).

B. Dependent claim 3

Claim 3 depends from claim 1 and recites that the label composer designates the representative image based on time stamp data associated with the images being stored in the memory of a portable data storage device received in the port (see, e.g., ¶ 46).

C. Dependent claim 6

Claim 6 depends from claim 1 and recites that the label composer is operable to designate the representative image before any of the images in the collection are stored in the memory of the portable data storage device received in the port (see, e.g., ¶ 23).

D. Independent claim 9

The aspect of the invention defined in independent claim 9 is a machine-implemented image processing method (FIG. 3; ¶¶ 34, 35, 39; FIG. 6, blocks 92, 160; ¶¶ 45, 53, 55). In accordance with this method, an image (FIG. 5, element 90) in a collection of images being stored in a portable data storage device (FIG. 3, element 52; ¶ 34) is designated as a representative image that represents the images in the collection (FIG. 6, block 92; ¶ 45). The portable data storage device (FIG. 3, element 52; ¶ 34) has a memory (FIG. 3, element 54; ¶ 34) that is configured to store the collection of images and a digital label (FIG. 3, element 10; ¶ 34) that includes a plurality of switchable display elements each capable of presenting one of at least two possible colors (¶¶ 24, 26; FIG. 1). The display elements in the digital label of the portable data storage device are selectively oriented to print an image corresponding to the designated representative image (FIG. 6, block 160; ¶¶ 53, 55).

E. Independent claim 14

The aspect of the invention defined in independent claim 14 is an image processing apparatus (FIG. 2A, element 24; FIG. 2B, element 30; FIG. 2C, element 40; FIG. 3, element 50). The image processing apparatus includes means (FIG. 3, element 76; ¶ 39) for designating an image (FIG. 5, element 90) in a collection of images being stored in a portable data storage device (FIG. 3, element 52; ¶ 34) as a representative image that represents the images in the collection (FIG. 6, block 92; ¶ 45). The portable data storage device (FIG. 3, element 52; ¶ 34) has a memory (FIG. 3, element 54; ¶ 34) that is configured to store the collection of images and a digital label (FIG. 3, element 10; ¶ 34) that includes a plurality of switchable display elements each capable of presenting one of at least two possible colors (¶¶ 24, 26; FIG. 1). The image processing apparatus additionally includes means (FIG. 3, element 58; ¶ 35) for selectively orienting the display elements in the digital label of the

portable data storage device to print an image corresponding to the designated representative image (FIG. 6, block 160; ¶¶ 53, 55).

F. Independent claim 17

The aspect of the invention defined in independent claim 17 is a machine-readable medium storing machine-readable instructions (¶¶ 8, 32) for causing a machine (FIG. 2A, element 24; FIG. 2B, element 30; FIG. 2C, element 40; FIG. 3, element 50) to perform operations including the following operations. The machine-readable instructions cause the machine to designate an image (FIG. 5, element 90) in a collection of images being stored in a portable storage data device (FIG. 3, element 52; ¶ 34) as a representative image that represents the images in the collection (FIG. 6, block 92; ¶ 45). The portable data storage device has a memory (FIG. 3, element 54; ¶ 34) that is configured to store the collection of images and a digital label (FIG. 3, element 10; ¶ 34) that includes a plurality of switchable display elements each capable of presenting one of at least two possible colors (¶¶ 24, 26; FIG. 1). The machine-readable instructions cause the machine to selectively orient the display elements in the digital label of the portable data storage device to print an image corresponding to the designated representative image (FIG. 6, block 160; ¶¶ 53, 55).

G. Independent claim 20

The aspect of the invention defined in independent claim 20 is a data storage system that includes a memory (FIG. 10B, element 132; ¶ 51), a digital label (FIG. 10A, element 10; ¶ 51), a label composer (FIG. 10B, element 152; ¶ 51), a label adapter (FIG. 10B, element 154; ¶ 51), and a portable housing (FIG. 10A, element 134; ¶ 51). The memory is configured to store images. The digital label includes a plurality of display elements each capable of presenting one of at least two possible colors (¶¶ 24, 26; FIG. 1). The label composer is operable to designate an image (FIG. 5, element 90) in a collection of images stored in the memory as a representative image that represents the images in the collection (FIG. 6, block 92; ¶¶ 45, 52). The label adapter is coupled to the digital label and is operable to selectively configure the display elements in the digital label to present an image corresponding to the representative image designated by the label composer (FIG. 6, block 160; ¶¶ 53, 55). The portable housing is configured to plug into a port of an external device (¶ 54). The portable

housing contains the memory and the label adapter (§ 51; FIG. 10B). The portable housing has a surface that supports the digital label (§ 51; FIG. 10A).

H. Dependent claim 29

Claim 29 depends from claim 20 and recites that the housing contains the label composer (see, e.g., § 51).

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 1-30 stand rejected under 35 U.S.C. § 102(e) over Niikawa (U.S. 6,992,672).

VII. Argument

Rejection under 35 U.S.C. § 102(e) over Niikawa (U.S. 6,992,672)

A. Applicable standards for sustaining a rejection under 35 U.S.C. § 102(e)

The relevant part of 35 U.S.C. § 102(e) states that a person shall be entitled to an invention, unless - "the invention was described in -- (1) an application for patent published under section 122(b), by another filed in the United States before the invention by the applicant for patent..." Anticipation under 35 U.S.C. § 102(e) requires that each and every element of the claimed invention be present, either expressly or inherently, in a single prior art reference. *EMI Group N. Am., Inc., v. Cypress Semiconductor Corp.*, 268 F.3d 1342, 1350 (Fed. Cir. 2001).

B. Independent claim 1

Independent claim 1 recites:

1. An image processing apparatus, comprising:
a port configured to receive a portable data storage device having a memory configured to store a collection of image data and a digital label including a plurality of display elements each capable of presenting one of at least two possible colors;

a label composer operable to designate an image in a collection of images being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection; and

a print module coupled to the port and the label composer and operable to selectively configure the display elements in the digital label of the portable data storage device received in the port to print an image corresponding to the representative image designated by the label composer.

As explained in detail below, the rejection of independent claim 1 under 35 U.S.C. § 102(e) over Niikawa should be withdrawn because Niikawa neither expressly nor inherently discloses each and every element of the invention defined by the claim. In particular, Niikawa neither expressly nor inherently discloses “a label composer operable to designate an image in a collection of images being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection.”

1. The Examiner's position and Appellant's rebuttal

In pertinent part, the rejection of claim 1 is premised on the Examiner's position that (§ 2 on pages 3-4 of the final Office action):

...Niikawa discloses the digital camera, which reads on claimed label composer; having a user interface that allows a user to select an image from a group of images stored in memory, which reads on claimed operable to designate an image in a collection of image data being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection; as disclosed at column 15, lines 6-9 and column 20, lines 39-44. ...

In col. 15, lines 6-9, Niikawa discloses that when the camera 100 (see FIGS. 14, 15, 18) is in the reproduction mode, image data is read out of the image memory 209 of the camera and displayed on the LCD display 110 of the camera 100 sequentially in frame number order in response to user operations of the UP and DOWN switches 111a and 111b of the camera 100 (see col. 13, lines 40-44; col. 14, line 66 - col. 15, line 9). Neither the UP switch nor the DOWN switch constitutes a label composer that designates an image in a collection of images as a representative image that represents the images in the collection and

is printed as such on a digital label of the portable data storage device. Instead, in response to operation of the UP and DOWN switches, the camera retrieves a preceding or successive one of the image frames stored on the memory card for display on the LCD 110 of the camera 100. In this process, the signals transmitted in response to the operation of the UP and DOWN switches do not designate an image on the memory card as a representative image that represents a collection of the images on the memory card. Instead, these signals simply trigger the loading of the next image in an ordered sequence of images from the memory card into the image memory 209 of the camera 100. At the time such signals are transmitted, the next image that will be displayed has not been loaded from the memory card into the image memory 209 of the camera (see col. 13, lines 20-21: "The image memory 209 has storage capacity for one-frame data"). Therefore, the camera 100 does not have the filename nor any other identifier that possibly could be used to "designate" an image stored on the memory card as a representative image that represents the images on the memory card.¹

In col. 20, lines 38-44, Niikawa describes aspects of a camera 100' in which the LCD section 110 is either turned off or not present (see, e.g., col. 17, line 39 - col. 18, line 6) and the LCD 10 of the memory card 56 is used as a display section of the camera 100' (see col. 18, lines 7-9, and FIGS. 25 and 26). In particular, this disclosure describes a "reproduction" mode of operating the camera 100' in which one of the images stored on the memory card 56 is displayed on the LCD 10 at a time. In this mode of operation, the camera 100' does not "designate an image in a collection of images being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection," as recited in claim 1. Instead, in response to a frame change request in the form of a signal from the button 121 (see FIG. 25), the camera 100' retrieves a preceding or successive one of the image frames stored on the memory card 56 for display on the LCD 10. In this process, the signal transmitted in response to the operation of the button 121 does not designate an image on the memory card as a representative image that represents a collection of the images on the memory card. Instead, this signal simply triggers the loading of an image corresponding to the preceding or successive frame number from the memory portion of the memory card into the LCD display 10. At the time such signals are transmitted, the

¹ The verb "designate" means "to indicate and set apart for a specific purpose, office duty" (Merriam-Webster's Collegiate® Dictionary, Tenth Edition (1995)). It is noted that images corresponding to certain frame numbers may have been deleted from the memory card.

camera 100' does not have the filename nor any other identifier of the next image that will be displayed and therefore the camera 100' does not have any information that possibly could be used to designate an image stored on the memory card as a representative image that represents the images on the memory card.²

In the Amendment dated February 13, 2008, Appellants explained how the subject matter defined in claim 1 distinguished Niikawa's disclosure in col. 20, lines 39-44. In response to this explanation, the Examiner stated that (§ 4, third paragraph, on pages 11-12 of the final Office action):

However, the examiner respectfully disagrees. Col. 20, lines 39-44 disclose being able to designate particular image data to be displayed on the LCD screen of the memory. The image designated may be chosen as a representative image that represents images in the collection of images on the memory. Whether the disclosure talks of it being in a "reproduction" mode or not makes no consequence with respect to the claim limitations. The user's having the image displayed may be the designating of that image as a representative image.

In this statement, the Examiner has not pointed to any element of a machine processing apparatus disclosed in col. 20, lines 39-44 that constitutes "a label composer operable to designate an image in a collection of images being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection." As explained above, the signal transmitted in response to the operation of the button 121 simply triggers the retrieval of an image corresponding to the preceding or successive frame number from the memory portion of the memory card and the rendering of the retrieved image on the LCD display 10. At the time such a signal is transmitted, the camera 100' does not have the filename nor any other identifier of the next image that will be displayed and therefore the camera 100' does not have any information that possibly could be used to designate an image stored on the memory card as a representative image that represents the images on the memory card.³

The Examiner's statement that "The image designated may be chosen as a representative image that represents images in the collection of images on the memory"

² See note 1, supra.

³ See note 1, supra.

suggests that the Examiner has taken the position that the LCD display 10 constitutes the “label composer” recited in claim 1. The language of claim 1, however, requires the designation of the representative image to occur before the image is printed (see the word “designated” in the last line of claim 1). Therefore, the LCD display 10, which passively displays an image retrieved from the memory card, cannot constitute the “label composer” recited in claim 1 because the displaying of an image cannot constitute a designation that is used by a print module to selectively configure the display elements of the LCD display 10 to print the designated image; indeed, the image already has been printed.

The Examiner's statement that “The user's having the image displayed may be the designating of that image as a representative image” suggests that the Examiner has taken the position that the user constitutes the “label composer” recited in claim 1. However, neither the user nor any of the Examiner's imagined hypothetical mental steps of the user is an element of an image processing apparatus. In addition, the user has no knowledge of an image before the image is displayed on the LCD 10 and therefore it is not possible for the user to designate the image as a representative image that represents the images in the collection, where that designation that is used by a print module to selectively configure the display elements of the LCD display 10 to print the designated image, as the image already has been printed.

For at least these reasons, the rejection of independent claim 1 under 35 U.S.C. § 102(e) over Niikawa should be withdrawn.

C. Dependent claims 2-8

1. Introduction

Each of claims 2-8 incorporates the elements of independent claim 1 and therefore is patentable over Niikawa for at least the same reasons explained above.

Each of claims 3 and 6 is patentable over Niikawa for the following additional reasons.

2. Dependent claim 3

Claim 3 depends from claim 1 and recites that “the label composer designates the representative image based on time stamp data associated with the images being stored in the memory of a portable data storage device received in the port.”

In support of the rejection of claim 3, the Examiner has taken the position that Niikawa discloses each and every element of claim 1 in col. 14, lines 55-60 and 66-67 and col. 15, lines 1-6 (see page 5, last ¶, of the final Office action). The cited disclosure, however, merely discloses that the images are retrieved by frame number, not time stamp data. Niikawa does not contemplate the possibility that the images stored on the memory card might be from sources outside the domain of the camera 100.

For this additional reason, the rejection of claim 3 under 35 U.S.C. § 102(e) over Niikawa should be withdrawn.

3. Dependent claim 6

Claim 6 depends from claim 1 and recites that “the label composer is operable to designate the representative image before any of the images in the collection are stored in the memory of the portable data storage device received in the port.”

In support of the rejection of claim 6, the Examiner has taken the position that (see page 5, third ¶, of the final Office action):

Regarding claim 6, Niikawa discloses everything as applied above for claim 1. In addition, Niikawa discloses that when the button to take a picture is pressed the image is set as the image on the memory display. In addition, Niikawa discloses that when the digital camera detects that the memory card is not inserted, normal camera use will continue. Therefore, an image for photographing may be designated before the memory is placed in the camera, which reads on claimed the label composer is operable to designate the representative image before any of the images in the collection are stored in the memory of the portable data storage device received in the port; as disclosed at column 16, lines 20-24 and column 15, lines 40-43.

When an image is captured without a memory card in the camera, the camera can only store a single image (see, e.g., col. 13, lines 20-22: “The image memory 209 has a storage

capacity for one-frame data”). Therefore, there is no “collection of images” of which the displayed image can be designated as a representative.

In addition, the cited disclosure relates to displaying data on the liquid crystal display 10 of a display section separate type digital camera (see col. 15, lines 11-15 et seq). In accordance with this disclosure, thumbnail images of all of the images stored on a memory card are displayed on the LCD 10. For example, in col. 15, lines 51-63, Niikawa explains that (emphasis added; also see col. 16, lines 25-41):

...After completion of the format process, a framework 80 for thumbnail images, the number of photographed frames 82 and the remaining capacity of the card 83 are displayed on the liquid crystal display 10. A thumbnail image of one frame is of a size of 80×60 pixels, and a space for display of information must be set in the periphery. Accordingly, thumbnail images of 16 frames can be displayed. Further, depending on the image size of the digital camera and the capacity of the memory card, more than 16 photographs can be taken. In this case, thumbnail images of all the frames are displayed by reducing the size of each image, or only thumbnail images of the latest used 16 frames are displayed.

Since all the thumbnail images in the collection are displayed on the LCD 10, none of the images can possibly have been designated as a representative image that represents the images in the collection.

For this additional reason, the rejection of claim 6 under 35 U.S.C. § 102(e) over Niikawa now should be withdrawn.

D. Independent claim 9

Independent claim 9 recites elements that essentially track the pertinent elements of independent claim 1 discussed above. Therefore, independent claim 9 is patentable over Niikawa for at least the same reasons explained above in connection with independent claim 1.

For example, Niikawa does not expressly nor inherently disclose “designating an image in a collection of images being stored in a portable data storage device as a representative image that represents the images in the collection.”

E. Dependent claims 10-13

Each of claims 10-13 incorporates the elements of independent claim 9 and therefore is patentable over Niikawa for at least the same reasons explained above.

Claim 11 also is patentable over Niikawa for the same additional reason explained above in connection with dependent claim 3.

F. Independent claim 14

Independent claim 14 recites elements that essentially track the pertinent elements of independent claim 1 discussed above. Therefore, independent claim 14 is patentable over Niikawa for at least the same reasons explained above in connection with independent claim 1.

For example, Niikawa does not expressly nor inherently disclose “means for designating an image in a collection of images being stored in a portable data storage device as a representative image that represents the images in the collection.”

G. Dependent claims 15 and 16

Each of claims 15 and 16 incorporates the elements of independent claim 14 and therefore is patentable over Niikawa for at least the same reasons explained above.

H. Independent claim 17

Independent claim 17 recites elements that essentially track the pertinent elements of independent claim 1 discussed above. Therefore, independent claim 17 is patentable over Niikawa for at least the same reasons explained above in connection with independent claim 1.

For example, Niikawa does not expressly nor inherently disclose “machine-readable instructions for causing a machine to: designate an image in a collection of images being stored in a portable storage data device as a representative image that represents the images in the collection.”

I. Dependent claims 18 and 19

Each of claims 18 and 19 incorporates the elements of independent claim 17 and therefore is patentable over Niikawa for at least the same reasons explained above.

J. Independent claim 20

Independent claim 20 recites elements that essentially track the pertinent elements of independent claim 1 discussed above. Therefore, independent claim 20 is patentable over Niikawa for at least the same reasons explained above in connection with independent claim 1. For example, Niikawa does not expressly nor inherently disclose "a label composer operable to designate an image in a collection of images stored in the memory as a representative image that represents the images in the collection."

K. Dependent claims 21-30

1. Introduction

Each of claims 21-30 incorporates the elements of independent claim 20 and therefore is patentable over Niikawa for at least the same reasons explained above.

Claims 22 and 29 also are patentable over Niikawa for the following additional reasons.

2. Claim 22

Claim 22 also is patentable over Niikawa for the same additional reason explained above in connection with dependent claim 3. Each of claims 23-28 incorporates the elements of claim 22 and therefore is patentable over Niikawa for the same additional reason.

3. Claim 29

Claim 29 depends from claim 20 and recites that "the housing contains the label composer."

The sole explanation given by the Examiner in support of the rejection of claim 29 is as follows: "Claim 29 is rejected upon the same reasoning as applied above for claim 20" (page 10, second ¶, of the final Office action). In the rejection of claim 20, however, the

Examiner has taken the position that (see page 7, last six lines, of the final Office action; emphasis added):

...Niikawa discloses the digital camera, which reads on claimed label composer; having a user interface that allows a user to select an image from a group of images stored in memory, which reads on claimed operable to designate at least one image in a collection of images stored in the memory as a representative image that represents the images in the collection; as disclosed at column 15, lines 6-9 and column 20, lines 39-44. ...

The digital camera, however, is not contained within a portable housing configured to plug into a port of an external device, as required by claim 29. The UP and DOWN switches disclosed in col. 15, lines 6-9, are part of the camera 100, and the button 121 disclosed in col. 20, lines 39-44, are part of the camera 100'. These switches and button are not contained within a portable housing configured to plug into a port of an external device and therefore cannot constitute a label composer as defined in claim 29.

For this additional reason, the rejection of claim 29 under 35 U.S.C. § 102(e) over Niikawa should be withdrawn.

VIII. Conclusion

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.


Charge any excess fees or apply any credits to Deposit Account No. 08-2025.

Applicant : Alfred I-Tsung Pan
Serial No. : 10/805,019
Filed : March 19, 2004
Page : 15 of 22

Attorney's Docket No.: 200311298-1
Appeal Brief dated Aug. 7, 2008
Reply to final action dated March 31, 2008

Respectfully submitted,

Date: Aug. 7, 2008



Edouard Garcia
Reg. No. 38,461
Telephone No.: (650) 965-8342

Please direct all correspondence to:

Hewlett-Packard Company
Intellectual Property Administration
Legal Department, M/S 35
P.O. Box 272400
Fort Collins, CO 80528-9599

CLAIMS APPENDIX

The claims that are the subject of Appeal are presented below.

Claim 1 (previously presented): An image processing apparatus, comprising:
a port configured to receive a portable data storage device having a memory configured to store a collection of image data and a digital label including a plurality of display elements each capable of presenting one of at least two possible colors;
a label composer operable to designate an image in a collection of images being stored in the memory of a portable data storage device received in the port as a representative image that represents the images in the collection; and
a print module coupled to the port and the label composer and operable to selectively configure the display elements in the digital label of the portable data storage device received in the port to print an image corresponding to the representative image designated by the label composer.

Claim 2 (original): The apparatus of claim 1, wherein the label composer is operable to drive the print module to print a reduced-resolution image of a higher resolution image being stored in the memory of the portable data storage device received in the port.

Claim 3 (previously presented): The apparatus of claim 1, wherein the label composer designates the representative image based on time stamp data associated with the images being stored in the memory of a portable data storage device received in the port.

Claim 4 (previously presented): The apparatus of claim 1, further comprising a user interface configured to present to a user images corresponding to the images in the collection being stored in the memory of the portable data storage device received in the port.

Claim 5 (previously presented): The apparatus of claim 4, wherein the user interface is configured to present for selection by the user a sequence of images corresponding to the images in the collection being stored in the memory of the portable data storage device received in the port.

Claim 6 (previously presented): The apparatus of claim 1, wherein the label composer is operable to designate the representative image before any of the images in the collection are stored in the memory of the portable data storage device received in the port.

Claim 7 (previously presented): The apparatus of claim 1, wherein the label composer is operable to designate the representative image after the images in the collection have been stored in the memory of the portable data storage device received in the port.

Claim 8 (original): The apparatus of claim 1, further comprising an optical lens and an image sensor for capturing images received through the optical lens.

Claim 9 (previously presented): A machine-implemented image processing method, comprising:

designating an image in a collection of images being stored in a portable data storage device as a representative image that represents the images in the collection, the portable data storage device having a memory configured to store the collection of images and a digital label including a plurality of switchable display elements each capable of presenting one of at least two possible colors; and

selectively orienting the display elements in the digital label of the portable data storage device to print an image corresponding to the designated representative image.

Claim 10 (original): The method of claim 9, further comprising printing on the digital label a reduced-resolution image of a higher resolution image being stored in the memory of the portable data storage device.

Claim 11 (previously presented): The method of claim 9, wherein the representative image is designated based on time stamp data associated with the images in the collection being stored in the memory of the portable data storage device.

Claim 12 (previously presented): The method of claim 9, further comprising presenting to a user images corresponding to the images in the collection being stored in the memory of the portable data storage device.

Claim 13 (previously presented): The method of claim 12, wherein a sequence of images corresponding to the images in the collection being stored in the memory of the portable data storage device is presented for selection by the user.

Claim 14 (previously presented): An image processing apparatus, comprising:
means for designating an image in a collection of images being stored in a portable data storage device as a representative image that represents the images in the collection, the portable data storage device having a memory configured to store the collection of images and a digital label including a plurality of switchable display elements each capable of presenting one of at least two possible colors; and
means for selectively orienting the display elements in the digital label of the portable data storage device to print an image corresponding to the designated representative image.

Claim 15 (original): The apparatus of claim 14, further comprising means for printing on the digital label a reduced-resolution thumbnail of an image being stored in the memory of the portable data storage device.

Claim 16 (previously presented): The apparatus of claim 14, further comprising means for presenting to a user images corresponding to the images in the collection being stored in the memory of the portable data storage device.

Claim 17 (previously presented): A machine-readable medium storing machine-readable instructions for causing a machine to:
designate an image in a collection of images being stored in a portable storage data device as a representative image that represents the images in the collection, the portable data storage device having a memory configured to store the collection of images and a digital label including a plurality of switchable display elements each capable of presenting one of at least two possible colors; and

selectively orient the display elements in the digital label of the portable data storage device to print an image corresponding to the designated representative image.

Claim 18 (original): The medium of claim 17, further comprising machine-readable instructions for causing the machine to print on the digital label a reduced-resolution thumbnail of an image being stored in the memory of the portable data storage device.

Claim 19 (previously presented): The medium of claim 17, further comprising machine-readable instructions for causing the machine to present to a user images corresponding to the images in the collection being stored in the memory of the portable data storage device.

Claim 20 (previously presented): A data storage system, comprising:
a memory configured to store images;
a digital label including a plurality of display elements each capable of presenting one of at least two possible colors;
a label composer operable to designate an image in a collection of images stored in the memory as a representative image that represents the images in the collection;
a label adapter coupled to the digital label and operable to selectively configure the display elements in the digital label to present an image corresponding to the representative image designated by the label composer; and
a portable housing configured to plug into a port of an external device, the portable housing containing the memory and the label adapter, and having a surface supporting the digital label.

Claim 21 (original): The system of claim 20, wherein the label composer is operable to drive the label adapter to present on the digital label a reduced-resolution thumbnail of an image stored in the memory.

Claim 22 (previously presented): The system of claim 20, wherein the label composer designates the representative image based on time stamp data associated with the images in the collection stored in the memory.

Claim 23 (previously presented): The system of claim 22, wherein the label composer designates as a representative image an image corresponding to one of the images in the collection associated with a latest time stamp.

Claim 24 (previously presented): The system of claim 22, wherein the label composer designates the representative image based on user input.

Claim 25 (previously presented): The system of claim 24, wherein the label adapter is configured to present on the digital label images corresponding to ones of the images in the collection stored in the memory.

Claim 26 (previously presented): The system of claim 25, further comprising a user input, wherein the label composer designates as the representative image one of the presented image selected by the user input.

Claim 27 (previously presented): The system of claim 26, wherein the label adapter is configured to present for selection by the user a sequence of images corresponding to the images in the collection stored in the memory.

Claim 28 (previously presented): The system of claim 27, wherein the sequence of images presented by the label adapter is ordered in accordance with time stamp data associated with the images in the collection stored in the memory.

Claim 29 (original): The system of claim 20, wherein the housing contains the label composer.

Claim 30 (original): The system of claim 20, further comprising an external power source comprising a housing configured to connect to the portable housing and containing a power supply and the label composer.

Applicant : Alfred I-Tsung Pan
Serial No. : 10/805,019
Filed : March 19, 2004
Page : 21 of 22

Attorney's Docket No.: 200311298-1
Appeal Brief dated Aug. 7, 2008
Reply to final action dated March 31, 2008

EVIDENCE APPENDIX

There is no evidence submitted pursuant to 37 CFR §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the pending appeal. Therefore, no copies are required under 37 CFR § 41.37(c)(1)(ix) in the pending appeal.

Applicant : Alfred I-Tsung Pan
Serial No. : 10/805,019
Filed : March 19, 2004
Page : 22 of 22

Attorney's Docket No.: 200311298-1
Appeal Brief dated Aug. 7, 2008
Reply to final action dated March 31, 2008

RELATED PROCEEDINGS APPENDIX

Appellant is not aware of any decisions rendered by a court or the Board that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal. Therefore, no copies are required under 37 CFR § 41.37(c)(1)(x) in the pending appeal.